

THE CONTOOCCOOK AND NORTH BRANCH RIVERS

A Report to the General Court



**New Hampshire Rivers Management and Protection Program
Department of Environmental Services
Office of the Commissioner
March 1991**



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A Report to the General Court

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Note: This document has been edited from its original form to allow for electronic storage. In addition, the maps have been resized for use on the Internet.

I. INTRODUCTION

The Contoocook River flows for 71 miles from Poole Pond in Rindge, New Hampshire, north to Concord, New Hampshire, where it flows into the Merrimack River. The North Branch River flows for 16 miles from Stoddard to Hillsborough where it joins the Contoocook River. The Contoocook and North Branch Rivers have been nominated by the Contoocook River Greenway Coordinating Committee for designation into the New Hampshire Rivers Management and Protection Program. The Contoocook and North Branch Rivers have been evaluated by the Department of Environmental Services and found to qualify for designation.

The Rivers Management and Protection Program Act (RSA Ch. 483) was passed by the General Court in 1988 and amended in 1990. The Act states in part: "it is the policy of the state to ensure the continued viability of New Hampshire rivers for the benefit of present and future generations. The state shall encourage and assist in the development of river corridor management plans and regulate the quantity and quality of in-stream flow along certain protected rivers or segments of rivers to conserve and protect outstanding characteristics including recreational, fisheries, wildlife, environmental, cultural, historical, archaeological, scientific, ecological, aesthetic, and community significance so that these valued characteristics shall endure as part of the river uses to be enjoyed by New Hampshire people."

The Act directs the Department of Environmental Services to receive and evaluate nominations for the designation of rivers or river segments to protect outstanding values and characteristics under the Rivers Management and Protection Program. The Rivers Management Advisory Committee and the Rivers Coordinator make recommendations to the Commissioner who in turn forwards a recommendation to the General Court for review and approval.

In fulfillment of this statutory directives the nomination of the Contoocook and North Branch Rivers is hereby forwarded to the General Court. The Department of Environmental Services recommends that these rivers be designated into the Rivers Management and Protection Program and classified as stated in the Summary and Recommendations section of this report under the provisions of the protection measures in RSA Ch. 483. The outstanding statewide and local resource values and characteristics which qualify these rivers for designation are described in this report.

II. THE CONTOOCCOOK AND NORTH BRANCH RIVERS NOMINATION

A. DESCRIPTION

The Contoocook River flows south to north for approximately 71 miles through southwestern and central New Hampshire. This river flows through the towns of Rindge, Jaffrey, Peterborough, Hancock, Greenfield, Bennington, Antrim, Deering, Hillsborough, Henniker, Hopkinton and Concord where it joins the Merrimack River. The North Branch River flows for 16 miles from Stoddard through Antrim and on to Hillsborough where it meets the Contoocook River.

The Contoocook River is a working river that supports both rural and urban habitats. Its drainage basin is 766 square miles and it has a total fall of over 1,500 feet. The corridor of the Contoocook River changes back and forth from rural agricultural, forested and wetland areas to urbanized town centers. The river provides recreational opportunity, water supply, power for electricity, waste assimilation and wildlife habitat. Route 202 follows much of the Contoocook River.

The North Branch River is more free-flowing and natural in character than the Contoocook River. Its shorelands are predominantly undeveloped with natural woodland buffers along most of the river. The riverbed is rocky, including large boulders, and there are several rapids along the entire length of the North Branch River. Route 9 out of Hillsborough provides a few scenic views of the North Branch River.

B. RIVER VALUES AND CHARACTERISTICS

The Rivers Management and Protection Program Act (RSA Ch. 483) lists nine river values and characteristics which may qualify a river for designation into the program. The resource values which qualify the rivers for designation are: geologic resources; wildlife, plant and fish resources; water quality; scenic values; historic and archaeological resources; community resources; managed resources; and recreational resources. The Contoocook and North Branch Rivers support many of these natural, managed, cultural, and recreational resource values and characteristics at a level of either statewide or local significance.

1 . Natural Resources

a. Geologic Resources: Glacial Lake Contoocook left large sand deposits in the forms of deltas and terraces near the Contoocook River. These deposits form the most productive aquifers in the region. The river itself is unusual in that it flows north-northeasterly, a feature that made it an important travel corridor in pre-colonial times.

b. Wildlife and Plant Resources: Two experienced bird watchers have tallied 117 species of birds dependent upon the rivers and their corridors. Of these birds two are recognized as endangered species, the pied-billed grebe and the bald eagle, and seven are identified as threatened, the common loon, osprey, northern harrier, common nighthawk, eastern bluebird, purple martin, and the great blue heron. There are approximately 48 mammals that are commonly found in the rivers and their corridors. The variety of plant life in the corridors is as diverse as its wildlife population. Arethusa, hoary mountain mint, sweet coltsfoot, and green-adder's mouth are among the endangered species found in the corridors according to

the New Hampshire Natural Heritage Inventory. An additional ten state threatened species can be found. There are three exemplary natural ecological communities found in Stoddard and Antrim. The North Branch River helps to support these environments within its corridor. The communities are an Atlantic white cedar swamp, a Southern New England level bog, and a Southern New England acidic seepage swamp.

c. Fish Resources: The Contoocook River is a vital component of the Merrimack River watershed anadromous fish restoration program. Anadromous fish are fish that live in saltwater, but return to freshwater to spawn. The Contoocook River is viewed as an outstanding nursery area for young salmon. The most significant, high quality habitat for salmon and other cold water fish are the rapids in the Hillsborough-West Henniker area. The slower moving sections of the river and impoundment areas provide excellent warm water fish habitat. The North Branch River provides habitat for cold and warm water fish.

d. Water Quality: The Contoocook and North Branch Rivers have been designated Class B waters by the N.H. General Court. The North Branch is currently meeting the designation standards and the Contoocook River is meeting all but eleven miles of its classification. The Department of Environmental Services has plans to survey the river to pinpoint the sources of the contamination problems and develop the appropriate control measures. The maintenance of a high level of water quality in this river is critical to its future use for water supply and recreational purposes, as well as the river's ability to support high quality wildlife and plant habitat.

e. Scenic Values: The scenic views of the rivers are diverse, from the panoramic view of Crotched Mountain from Powder Mill Pond to the view of the wild rapids of the North Branch from Route 9. Other spectacular views of the river and its corridor include floodplain and farmland views, falls and the woodlands that cover much of the shoreland.

2. Managed Resources

a. Impoundments: The North Branch River has five dams and the Contoocook River has twenty-five dams located on it. The Hopkinton-Everett Dam in Hopkinton is used for flood control purposes, two dams in Jaffrey are used for storage and fifteen dams are used for hydroelectric power, including one on the North Branch. The remaining dams in the river are listed as inactive.

b. Water Withdrawals: There are seven major, more than 20,000 gallons of water used per day, water users of the Contoocook River. Jaffrey and Concord use the water for their water supply and are considering expanding their water supply withdrawals. Other withdrawals are used for the purposes of sewage treatment and industrial uses. Population growth and development in this region of the state will likely lead to additional applications for water withdrawals from the river.

c. Wastewater Discharges: As an assimilator of municipal and industrial wastewater, the Contoocook River serves a vital function. Twenty-six permits to discharge wastewater to the river have been granted under the federal Clean Water Act and state water quality laws. Discharges include six wastewater treatment facilities, twelve hydropower facilities, and eight industrial facilities. Population growth and development in this region of the state will likely

lead to additional applications to discharge wastewater to the river.

3. Cultural Resources

a. Historic and Archaeological Resources: The Contoocook River played a pivotal role in the settlement and subsequent development of the region. The river and its banks provided many resources for early inhabitants, including fish, migratory birds, and an important route for communication and transportation. The Kon-wa-teg-ok trail connected the Native American villages along the Contoocook River. Seven archaeological sites have been recorded along the Contoocook River. Several villages, East Jaffrey, Peterborough, Bennington, Hillsborough, Henniker, Contoocook and Penacook, were established along the river to take advantage of natural falls or the water power that could be harnessed by dams. A history of the Contoocook River is a history of these towns. There are several sites in the Contoocook River Valley that are on the National Register of Historic Places.

b. Community Resources: The Contoocook River is a scenic and recreational resource for the communities that border it, as well as an important economic resource. In the town of Bennington, Monadnock Paper Mill depends upon river waters for power and paper making. Numerous other industries use the river for process or cooling water or to carry away wastes. Towns along the river use it for assimilation of treated waste. Many residents view the river as a recreational resource. Peterborough and Hillsborough both have community trails along the river. Antrim has trails along the river in McCabe Forest and Jaffrey and Henniker have riverfront parks with benches beside the water.

4. Recreational Resources

a. Boating: Much of the Contoocook River is enjoyed by boaters in three seasons. The river provides challenging rapids for expert canoeists and flatwater sections for those who enjoy a less challenging trip. The Contoocook River includes one of the premier whitewater boating stretches in New England. The rapids between Hillsborough and West Henniker offer high quality, Class III-IV (expert) whitewater including the famous Class IV "Freight Train Rapids". The river between Contoocook Village and The Island in Penacook is largely flatwater and is used by a variety of motorboats, party boats, canoes, and rowboats. The North Branch has an excellent section for expert whitewater paddlers. These rapids, which are rated as high as Class V are located between the double stone arch bridge on Route 9 and the old Hawthorne College campus.

b. Fishing: The Contoocook and North Branch Rivers provide cold and warm water habitats for several species of recreational and sport fish. According to the New Hampshire Fish and Game Department, the section of rapids between Hillsborough and West Henniker offers a high quality habitat for trout, is stocked, and is heavily fished. The section above Peterborough along Route 202 is a popular fishing area. Other areas of the main stem are more likely to contain warm water fish. There is fishing in most of the impounded areas and flat water stretches of the river. The North Branch offers good trout fishing and is stocked.

c. Other Recreational Potential: The Contoocook and North Branch Rivers have tremendous potential to support a variety of recreational activities both on the water and on

shore. These activities include swimming, golfing, picnicking, biking, hiking, cross-country skiing, birding, boating and fishing. d. Public Access: There are very few official boat access points along the Contoocook. The official access points are located on flatwater sections of the river which are suitable to use by motorboats. These access points include the Fish and Game access point at the covered bridge in Greenfield, the River Road access in Henniker, and the Island access in Penacook. Other access points for carry-in boats are bridge crossings over the river.

III. LOCAL SUPPORT

Local support for the designation of the Contoocook and North Branch Rivers into the New Hampshire Rivers Management and Protection Program is very strong. The Rivers Program Office has received letters of endorsement from local officials from thirteen of the fourteen river communities along the Contoocook and North Branch Rivers. Two public hearings were held in January of 1991 to receive public comments on the nomination of the rivers. The hearings were held in Peterborough and Henniker. Attendance at the hearings were thirty-eight and sixty people, respectively. An overwhelming majority of those who spoke, spoke in support of the nomination. Prior to the Department's public hearings, the Contoocook River Greenway Coordinating Committee held two public meetings of their own. These meetings were held in the summer of 1990 and were favorably attended. These meetings stimulated significant public comment and support for the nomination. The Southwest Region Planning Commission and the Central Regional Planning Commission are on the record in support of this nomination.

IV. SUMMARY AND RECOMMENDATIONS

The Contoocook and North Branch Rivers support a variety of significant state and local resources. To better protect and manage these resources, the Department of Environmental Services recommends the following actions:

Recommendation 1: The General Court should adopt legislation which designates the mainstem of the Contoocook River from the Outlet of Poole Pond to its confluence with the Merrimack River and the North Branch River from Rye Pond in Stoddard to its confluence with the mainstem of the Contoocook River into the Rivers Management and Protection Program and classifies the rivers as follows:

Contoocook River:

Community River - Outlet of Poole Pond in Rindge to Old Sharon Road Bridge in Jaffrey.

**Rural River - Old Sharon Road Bridge in Jaffrey to Noone Falls Dam in Peterborough.
Community River - Noone Falls Dam in Peterborough to North Peterborough Dam.**

Rural River - North Peterborough Dam to the monument on the Peterborough-Hancock town line.

Community River - The monument on the Peterborough-Hancock town line to the North Bennington Road Bridge in Antrim and Bennington.

Rural River - North Bennington Road Bridge in Antrim and Bennington to the confluence of the North Branch of the Contoocook River in Hillsborough.

Community River - Confluence of the North Branch River in Hillsborough to the Hosier Mill Dam in Hillsborough.

Rural River - Hosier Mill Dam in Hillsborough to the twin iron bridges in West Henniker.

Community River - The twin iron bridges in West Henniker to the Shoe Factory Dam in Henniker.

Rural River - Shoe Factory Dam in Henniker to the Riverhill Bridge in Penacook.

Community River - Riverhill Bridge in Penacook to the confluence with the Merrimack River.

North Branch River:

Rural River from the Outlet of Rye Pond in Stoddard to the confluence with the Contoocook River in Hillsborough.

Under the provisions of the protection measure amendments to RSA Ch. 483, these designations will provide increased protection for the river in the areas of water quality, new dam construction, channel alterations, and the siting of solid and hazardous waste facilities within the river corridor. A designation will also require the establishment of protected instream flow levels to maintain the minimum amount of water in the river that is necessary to safeguard public trust resources for which it is designated, including water quality, recreation, fisheries, and scenic values. A Local River Management Advisory Committee will be established to coordinate local issues related to the protection and management of the river and will provide local residents with a direct avenue for formal input to state decisions that affect the river. Finally, a designation will result in the development of a long-range management plan for the river that coordinates state planning and management of fisheries, water quality and quantity, and recreation.

The designation of the Contoocook and North Branch Rivers under the Rivers Management and Protection Program will clearly express the intent of the General Court with regard to the protection and management of the rivers and will focus attention on the rivers as natural resources of both statewide and local significance. This attention will help to insure greater scrutiny of plans or proposals so as to protect the resources for which the rivers were designated.

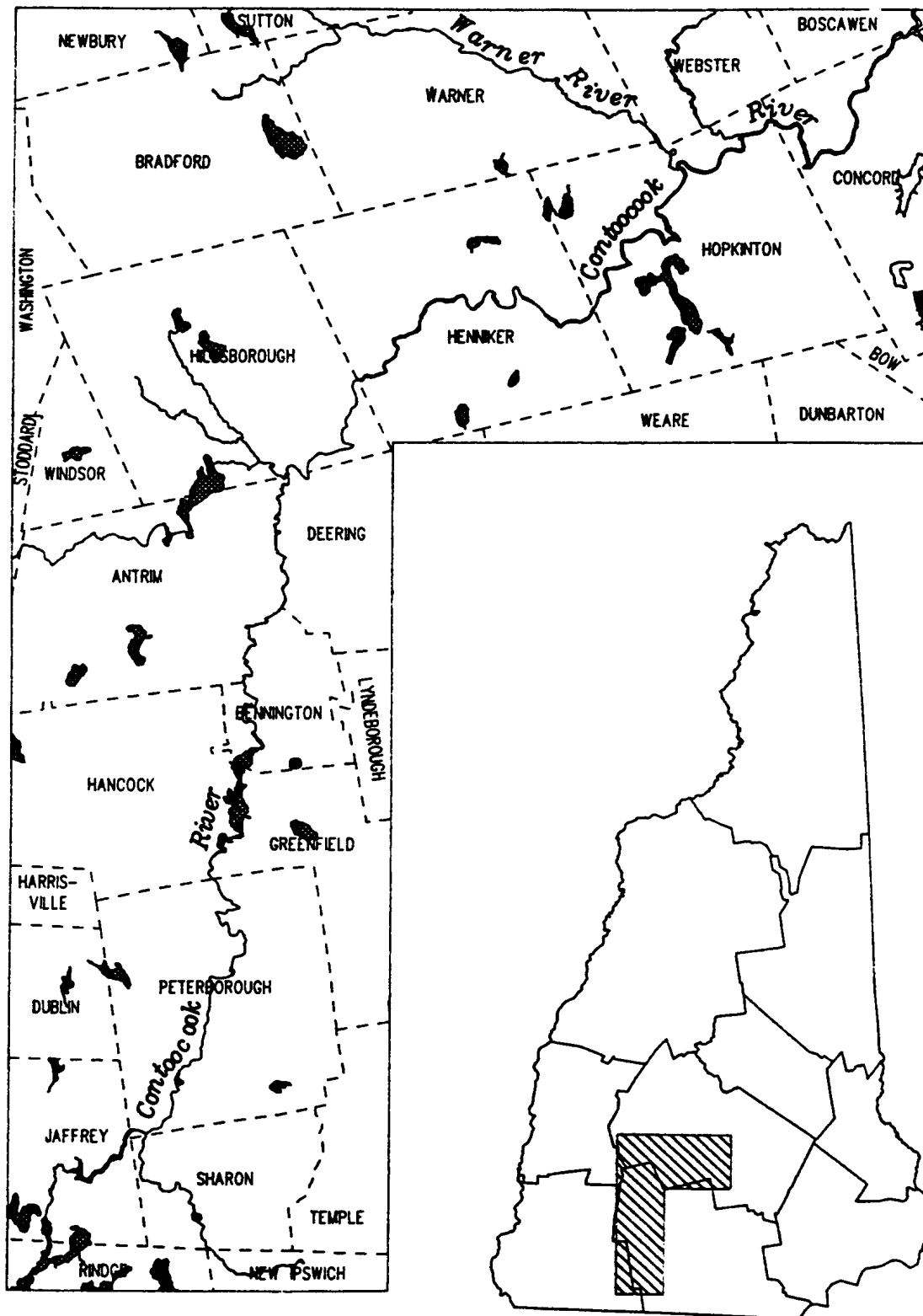
Recommendation 2: The towns along the Contoocook and North Branch Rivers should

continue to work toward the protection of the rivers through the adoption of local river corridor management plans.

While a state designation will improve the protection and management of the river itself, continuing local efforts will be needed to address the use and conservation of the river corridor. A growing recognition by local citizens of the Contoocook and North Branch Rivers valuable contribution to the overall quality of life in their communities is evidenced by their desire to see it designated into the Rivers Program. Citizen appreciation and concern for the river should be reflected in the decisions and actions of local officials. Upon request, the Department of Environmental Services will provide technical assistance to the Local River Advisory Committees and the towns along the Contoocook and North Branch Rivers on the development of local river corridor management plans, including comprehensive shoreland protection ordinances.

In summary, the establishment of a clear policy and specific instream protection measures by the General Court through designation, and a continuing commitment on the part of local governments and residents to protect and manage the river corridor through sound land use decisions will ensure that the outstanding resources of the Contoocook and North Branch Rivers will "endure as part of the river uses to be enjoyed by New Hampshire people."

CONTOOCCOOK RIVER



NORTH BRANCH RIVER

